DOCUMENT RESUME

ED 109 228 TM 004 689

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TITLE Stability and Concurrent Validity of the Rotter Internal-External Locus of Control Scale.
SPONS AGENCY Social and Rehabilitation Service (DHEW), Washington, D.C.; West Virginia Univ., Morgantown. Regional Rehabilitation Research and Training Center.
NOTE 7p.; For a related document, see TM 004 625

EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS Catholics; High School Students; *Locus of Control; Secondary Education; *Test Reliability; *Tests; *Test Validity
IDENTIFIERS Academic Interest Measures; MacDonald Tseng Locus of Control Scale; *Rotter Internal External Scale

ABSTRACT

A high school population (N = 541) was administered the Rotter Locus of Control in April and again the following November. At the second testing the MacDonald-Tseng and Rotter Internal-External Locus of Control Scales were given to examine their concurrent validity. The AIM-ETS Survey and a demographic survey were also administered. Test-retest reliability of the Rotter Scale and concurrent validity between the Rotter and MacDonald-Tseng scales were established. There was a significant correlation between internal subjects and their scores on the AIMS Survey.
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STABILITY AND CONCURRENT VALIDITY OF THE ROTTER INTERNAL-EXTERNAL LOCUS OF CONTROL SCALE *

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A high school population (N = 541) was administered the Rotter Locus of Control Scale in April and again the following November. At the second testing the MacDonald-Tseng and Rotter Internal-External Locus of Control Scales were given to examine their concurrent validity. The AIM-ETS Survey and a demographic survey were also administered.

Test-retest reliability of the Rotter Scale was established. Concurrent validity between the Rotter and MacDonald-Tseng scales was established. And a significant correlation between internal subjects and their scores on the AIMS Survey was discovered (P = .0038).

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TM 004 689

* This research reported in this article was supported in part by West Virginia University Regional Rehabilitation Research and Training Center (RT-15), through the U. S. Social and Rehabilitation Service.

STABILITY AND CONCURRENT VALIDITY OF THE ROTTER INTERNAL-EXTERNAL LOCUS OF CONTROL SCALE

The social learning theory developed by Julian B. Rotter examined the generalized expectancies with which subjects viewed reinforcement. When a subject perceived a reinforcement as "contingent upon his behavior or personal characteristics" he was said to be viewing with an internal locus of control. When a subject viewed a reinforcement as not being entirely contingent upon his actions, the residual became luck, chance, or powerful others, and the subject was said to have an external locus of control (Rotter, 1966).

Our objectives were to investigate the test-retest reliability of the Rotter I-E scale (a 29-item, forced choice six filler format) over an eight-month time period. We also sought to examine the concurrent validity of the Rotter's Internal-External Locus of Control Scale with the MacDonald-Tseng's shorter 12-item test containing no fillers.

METHODS

Subjects

The 541 students of a Catholic high school were the subjects of this study. Of these 541, 313 (58%) were males and 228 (42%) were females. Their ages ranged from 13 to 18. Eighty-nine percent of the students came from an urban area while 11% listed their home setting as rural. The four years of high school were equally represented: 26% (143) were freshmen; 26% (139) sophomores; 25% (136) juniors; and 23% (123 seniors. Students' religion was reported as 89% Catholic, 5% Protestant, 1% Jewish, 3% none and 2% other.

Instruments

The instruments used in this study were the Rotter Internal-External Locus of Control scale (Rotter, 1966), the AIMS-ETS Survey, and a demographic data sheet.

Test-retest reliabilities reported by Rotter (1966) are consistent with the results of other researchers .49 - .83 (Hersch, 1967).

The MacDonald-Tseng Locus of Control Scale was arranged randomly in the test booklets with the Rotter Locus of Control Scale. The MacDonald-Tseng scale is based on the factor analyses of the Rotter and James I-E Scales (Tseng, 1971).

The AIMS-ETS Questionnaire consists of 31 items presented in the Likert-type form with seven possible choices ranging from "Extremely important" to "Extremely unimportant." Students were instructed as follows: "There are no right or wrong responses about the following statements. We are interested in your personal attitude and impressions in regard to each statement. Therefore, feel free to express your personal opinion by circling the appropriate response." This instrument yields data concerning how important subjects view 31 life goals.

RESULTS

In order to determine the stability of the Rotter I-E Scale, both correlational analysis and *t*-test for correlated means were conducted using the test and retest scores. The product moment correlation between the test and retest measures with an eight-month interval was $r = .55$ ($N = 306$, $p<.001$). The mean difference between the test and retest scores was examined by *t*-test which yielded a *t*-value of 1.14

with 305 degrees of freedom. This indicated no significant difference between the two means and that the Rotter scale did yield stable measures.

The MacDonald-Tseng Internal-External Locus of Control correlated with the early administration of the Rotter I-E Scale at .37 ($N = 316$, $p < .001$) and with the later testing at the .48 level ($N = 505$, $p < .001$).

Subjects were classified into internals ($N = 139$) and externals ($N = 139$) using the 27% cut-off on the Rotter retest scores. These two gorups were compared in terms of variable sex and grade.

Chi Square analysis revealed that males in this sample were significantly more internal than the females ($\chi^2 = 13.20$, $p < .001$). Freshmen were also more external than other grades ($\chi^2 = 10.54$, $p = .01$). Table 1 summarizes the findings.

Insert Table 1

DISCUSSION

Test-retest reliability of the Rotter I-E Scale was established over an eight-month period. Concurrent validity of the MacDonald-Tseng and Rotter Internal-External Locus of Control Scales was established at $r = .42$ ($p < .001$). It can be said that the MacDonald-Tseng scale provides a shortened form of Rotter's scale with the advantages of the Likert format and it has no fillers.

TABLE 1

Chi Square Tables for Rotter's Locus of Control Scale

	Internals	By Sex Externals
Males	94	64
Females	45	74
		P<.001

	Internals	By Grade Externals
Freshmen	19	40
Sophomores	44	43
Juniors	41	31
Seniors	35	25
		P = .01

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